

8, 9 and 10. The first three steps in the development of the embryo-sac from the lower cell of the four shown in Fig. 7. Integuments are not shown.—Fig. 11. Outline only of embryo-sac with egg apparatus and very large antipodal cells.—Fig. 12. Ovule borne on a long stalk.  $\times 150$ . Figs. 1–11  $\times 420$ .

✓ *Laphamia ciliata*, sp. nov.—Perennial, fruticose, 15–30<sup>cm</sup> high, with slender terete spreading branches, cinereous-pubescent throughout: leaves alternate or the lower sometimes opposite, deltoid or ovate, more or less punctate especially on the upper less pubescent green surface, somewhat decurrent on the petioles, these about half as long as the blades; lower leaves 10–15<sup>mm</sup> long and about as broad, crenate or irregularly dentate: upper leaves decreasing in size, narrower in proportion to their length and more deeply toothed: heads on slightly clavate pedicels 5–15<sup>mm</sup> long terminating the short upper branches, light-yellow, about 40-flowered, 5–7<sup>mm</sup> in diameter; involucre scales usually 12, equal, obscurely biseriate, oblanceolate, about 2<sup>mm</sup> wide near the apex, persistent, spreading or slightly reflexed at maturity: rays nearly white, crenately 3-toothed, 7-nerved, pistillate, about 3<sup>mm</sup> long and 2<sup>mm</sup> wide above the throat; disk flowers perfect, yellow, 4<sup>mm</sup> long including immature akene 2<sup>mm</sup> long; style branches exerted, recurved, 1<sup>mm</sup> long, minutely pubescent; akenes flattened, oblong, slightly curved, 2<sup>mm</sup> long, 0.5<sup>mm</sup> wide, black, with white callous ciliate margins; pappus a callous crown with 2 subequal hispidulous bristles 2<sup>mm</sup> long, from opposite margins.—Type specimen in National Herbarium collected by D. T. MacDougal, on rocks along Pine creek, near Pine, Arizona, August 21, 1891, no. 676. Cotype in National Herbarium, collected by J. W. Toumey, on Tucson mountains, near Tucson, Arizona, May 15, 1892, no. 629.

This species has the habit of *Laphamia rupestris* and agrees in all respects except the akene with the generic characters of *Laphamia*. The akene with its cartilaginous ciliate margin agrees with the characters of *Perityle*. The small many-flowered heads and the ciliate-margined akenes with a pappus of two slender bristles distinguish it from any similar species of *Laphamia*, while the fruticose much branched habit and nearly entire leaves distinguish it from any of the known species of *Perityle*.—LYSTER H. DEWEY, *Washington, D. C.*